

THE DELAWARE^{AND} HUDSON RAILROAD BULLETIN

*"The
D&H"*

DECEMBER 1, 1935

The Christmas Spirit

The Lovely Legends of the day; the stories and the songs and the half-fairy lore that gather around it; the ancient traditions of dusky woods and mystic rites: the magnificence or simplicity of Christian observance; * * * the lighting of Christmas trees and hanging up of Christmas stockings, the gifts, the happy family meetings, the dinner, the game, and the dance — they are all natural signs and symbols, the flower and the fruit, of Christmas. For Christmas is the day of days which declares to the universal human consciousness that peace on earth comes only from good will to men.— George W. Curtis.



The DELAWARE AND HUDSON RAILROAD

CORPORATION

BULLETIN



Locomotives Had Names

When Veteran Engineman Started as a Wiper at Oneonta in 1883

LOCOMOTIVES were named for stations, persons, and animals in the early eighties," says ELMER E. KERR, retired Susquehanna Division engineer, who has a list showing the name and the number of every engine stationed at Oneonta when he went to work there as a wiper in 1883. Practically every station on the division, as well as some Pennsylvania and Saratoga Division points, are represented on the locomotive roster. Other engines were named for animals such as the *Reindeer*, *Panther*, and *Lion*, while a few took their names from officials, such as the *J. White Sprong*, honoring the veteran purchasing agent.

MR. KERR obtained his first job with the Delaware and Hudson through the kindness of a man who had once worked for his father. James Whitaker left the elder Kerr's employ to work for the railroad, eventually holding the position of night engine dispatcher at Oneonta. When MR. KERR became 21 he wrote to Mr. Whitaker applying for a position in the locomotive department. A few days later he received a reply asking him to report at Oneonta for duty as a wiper.

Seven wipers were assigned to each engine to be



ELMER E. KERR

cleaned, three for each side and one for the cab. One man polished the cylinders, guides, crosshead, and one driving wheel, the second took the next driver and adjacent parts, while the third cleaned the other driving wheel and parts under the cab. When they were through Tom Riley, the "boss wiper," inspected their work by running his hand over the parts they would be most apt to skip; if his hand came away clean they went to the next engine—if dirty, they began all over again. To do a satisfactory job took seven men over an hour per freight engine; passenger power took longer as they had to clean the tank wheels in addition.

In the fall of 1883 MR. KERR was sent out to the fuel pile to "heave" coal. There was no coal chute then, the fuel being piled along the track. Gangs of men were sent out to toss the lumps of anthracite up on a platform from which it was later transferred to the locomotive tenders. Sometimes, when the piles were high, they loaded the tenders direct; however, this was not the usual practice. That winter he was sent back to the roundhouse where he continued as a wiper until October 1, 1885, when he became a hostler, banking fires, handling the engines be-

tween the roundhouse, coal and sand piles at fireman's wages.

There were two roundhouses at Oneonta then, one near the main track and another back toward the swamp. To reach the latter they had to go up the main track and back in over a long lead track; later it was arranged so they could run on the table of the big house, cross it, and run over a short connecting track to the other house.

In June, 1886, Master Mechanic Thomas Howard promoted MR. KERR to the rank of fireman, assigning him to Engineer O. M. Bates, on locomotive 212. Ten hours was considered good running time for the 110-mile round trip between Oneonta and Delanson, as each crew had to do considerable switching at stations, much of the line was single track, and there was an 18-mile-an-hour speed restriction on freight trains. In each caboose was a "Dutch clock," a speed recording device which traced the train's speed on a roll of paper. If an engineer exceeded the limit he was suspended for several days.

Although they figured on about 10 hours for the Oneonta-Delanson trip, it frequently took much longer than that, and once MR. KERR was out for six days without once taking off his clothes. On March 12, 1888, his crew left Oneonta and arrived at Delanson (then Quaker Street) after an average trip. By the time they were marked for the return trip ten inches of snow had fallen and they were ordered to open the line to Albany with a snow plow. The plow was placed between two engines and they battled their way through to Albany and back to Altamont where they were met by a conductor whose train was stuck in the Slate Cut about a mile south of Altamont. They hammered through the drifts, unable to see further than a few feet ahead of the engine, and were making good headway when they crashed head-on

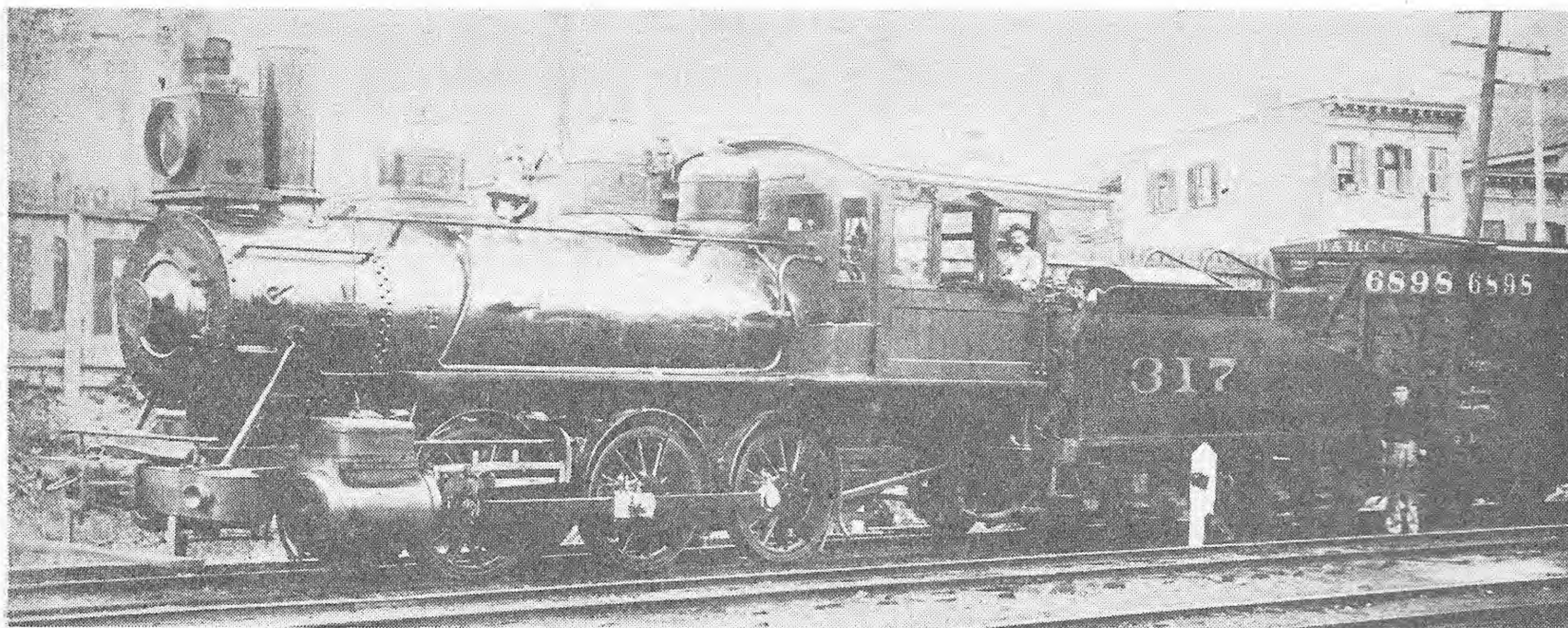
into the stalled train, derailing MR. KERR'S engine, and the snowplow cut a big hole in the back end of their tender. By morning the entire train was completely covered except for the brake wheels on top of the box cars.

For three days MR. KERR kept his engine alive by shoveling snow into the tender cistern. Finally, on Friday, a rescue train broke through from Delanson and they limped in for repairs. They were unable to repair the tender at Delanson so they started for Oneonta with about a foot of water in the tank, stopping at every water plug for as much as the damaged tank would hold.

On December 30, 1890, MR. KERR became an engineer, in which capacity he continued for 42 years prior to his retirement on pension, February 1, 1932, except for short periods of firing during the depression of 1893. MR. KERR saw service in fast freight, yard, passenger, and pusher service. His favorite, however, was pusher service on Harpersville Hill, where he was working at the time of his retirement.

MR. KERR has an old roster, at the foot of which is recorded one of the most miraculous incidents which ever happened on the A. & S. In 1869 part of a train standing at Richmondville station broke away and raced back down the hill, shot through Cobleskill, negotiating all of the street crossings without hitting a single person or object. It climbed the hill north of the village, finally stopping at the next station, Barnerville, after a runaway trip of over 8 miles.

Since his retirement MR. KERR has lived at the Wales Hotel, Binghamton. He has four children: Harry, who is in business in Albany; Clarence, of the United States Navy; Arthur, a musician in Long Island City; and Mrs. Leonard van Bramer, of Syracuse. He is a member of the B. of L. E. and a Mason.



Ethiopia and Its Railroad

IN view of the fact that Abyssinia (Ethiopia) has now become the theatre of war, some account of its solitary railway may be of interest. The country has no seaboard of its own, its northeastern frontier being separated from the Red Sea and the Gulf of Aden by Eritrea and French and British Somaliland. On this coastal strip is situated the French port of Djibouti, which is the nearest outlet to the sea for the Abyssinian capital, Addis Ababa, and is connected thereto by a railway.

In 1896 France agreed to recognize the designation of Djibouti as the official port of Abyssinia, and from that year dates the conception of the railway joining Djibouti to Addis Ababa, the construction of which by France was officially recognized by Great Britain and Italy in the treaty of 1906.

Two years before, by a contract dated March 9, 1894, the Emperor Menelik II had granted to M. Ilg a concession for a railway to be built in three sections: from Djibouti to Harar; Harar to Entotto, then capital of Abyssinia; and Entotto to the White Nile across the Kafa. The first section was to be built within two years of the date of the concession. With M. Chefneux, M. Ilg founded the *Compagnie Imperiale de Chemins de Fer Ethiopiens*, and this company obtained the authorization of the French Government to construct the first section of the railway from Djibouti to Harar across French Somaliland. Meanwhile preliminary studies on the route had shown that it would be extremely difficult to reach Harar, and the company obtained permission from the Abyssinian Emperor Menelik to fix its first provisional terminus at the place which has since become Dire Douah.

In October, 1897, work began at Djibouti and was continued across the rugged, desert country of French Somaliland towards Harar, but in the face of hostile tribes and a thousand other difficulties the *Compagnie Imperiale* was unable to continue beyond Dire Douah, and it was not until the French Government had lent financial aid and a new company—the *Compagnie de Chemin de fer Franco-Ethiopien de Djibouti a Addis-Ababa*—had been formed that work could be resumed. Addis Ababa had now become the capital of Abyssinia and, as such, was to be the terminus under the new agreement.

In 1909 work was resumed, and by 1913, 93 miles of line had been constructed as far as Miesso. At the end of that year the steel bridge over the Hawash, 500 ft. long and 200 ft. above the river,

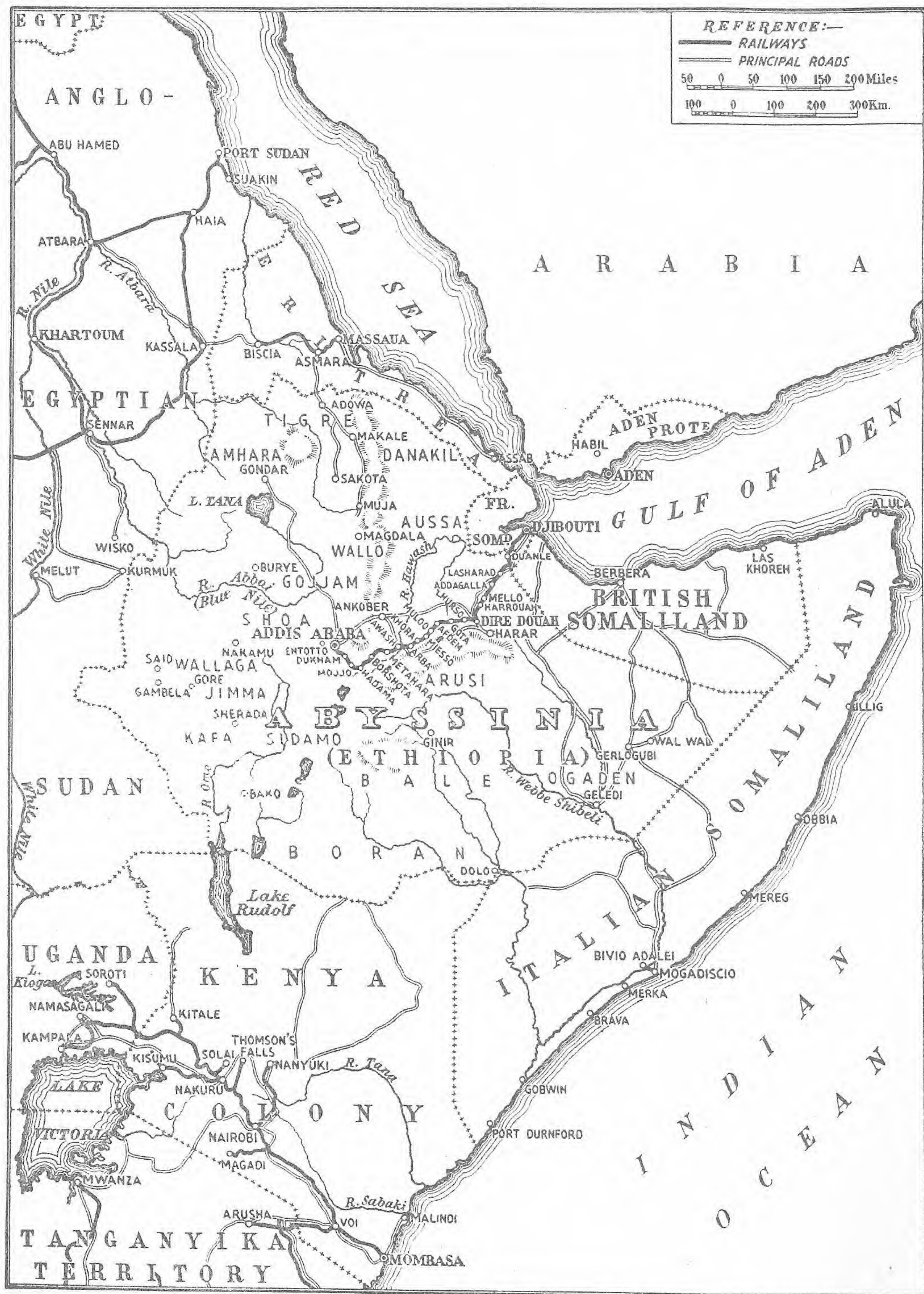
was completed, and by the end of 1914, in spite of difficulties occasioned by mobilization following the outbreak of the war, the line had reached Mojjo, 444 miles from Djibouti. In 1915 it attained to within a few miles of Addis Ababa, but, owing to delay on the part of the Government in handing over land, it was not until June, 1917, that the completed line, 487 miles in length, could be opened for traffic throughout. Since then numerous modernizations have been effected; among these was the opening of the new station buildings at Addis Ababa in December, 1929.

Today Djibouti is an active little town with a population of several hundred Europeans and 15,000 natives. Leaving it, the railway runs across a desert region inhabited by the nomad Somali and Issa tribes—whose only resource is the breeding of camel, sheep and goats and some cattle—until it reaches Dire Douah, 193 miles distant and 3,900 ft. in altitude. Dire Douah is a center for the produce of the Harar and Tchercher provinces—mainly livestock, coffee, wax, cereals, butter and leather. Caravans also take back into the interior cotton goods, salt, sugar, paraffin, soap, building materials (corrugated iron, builders' hardware), iron products, wines, liquors, etc., brought in by the railway.

After Dire Douah the line leaves the Danakil desert and runs along the foot of the Tchercher mountains, the fertile valleys of which are inhabited by sedentary Galla peoples, and produce coffee and cereals; it then crosses, at the Col des Assabots (4,820 ft.) the massive spur running northwards from the main chain, that deflects the Hawash River in that direction.

From the Hawash to Addis Ababa, which stands at an altitude of 7,700 ft., the line climbs to attack the central plateau of Abyssinia, with its striking valleys, varied crops and vast horizons. Addis Ababa, the terminus of the line, is also the largest market. It was formerly a military camp of the Emperor Menelik, but has now become a large town, made more agreeable by the forest of eucalyptus trees which shade it. Goods brought up by railway are carried onwards into the interior to distances up to 250 miles or more by mule or camel caravans or by automobiles, as parts of certain tracks have recently been made passable to motor vehicles.

In return Addis Ababa receives from the Shoa, skins and cereals and some flour; from the Gore provinces and from Wallaga to the west, ivory,



—Railway Gazette

skins, wax, rubber, gold, and platinum; and from the Gojjam—around the sources of the Blue Nile where it leaves Lake Tana—skins. From the Jimma to the southwest, one of the richest provinces of Abyssinia and one of those in which most trade is done, as well as from the Kafa, a wild province, are brought coffee, cattle skins, wax, civet and also the rare and much sought after black panther skins.

This 487-mile line is of metre gauge and, in its climb up from the coast, it rises to a height of over 8,000 ft. All rolling stock is fitted with automatic couplings, and only tender engines are used owing to the long distances between permanent sources of water supply. The company possesses the following rolling stock: 54 locomotives, 46 passenger coaches with seating for 2,706 passengers, 445 freight cars. At first no night trains were run because of the depredations of native tribes, but since 1926 they have been run regularly except in the rainy season, when the track is liable to damage.

There are four trains each way a day. The time taken by passenger train from Addis Ababa to Djibouti was formerly three days, but now some trains do the journey in 33 hours, and special trains have done it in 25 hours. Freights take up to five days. Mixed trains are usually run. The company has workshops at Dire Douah and depots at Djibouti, Dire Douah and Addis Ababa. Fares are cheap, particularly for natives—approximately half the American coach rate. The first class ordinary fare from Djibouti to Addis Ababa is 600 francs, or about 6 cents a mile.

The total cost of construction was 114 million francs. The number of passengers carried a year varies from 300,000 in 1929 to 120,000 in 1933, and the quantity of goods imported from 49,000 tons in 1929 to 30,000 tons in 1933; the quantity exported has been fairly steady, about 25,000 tons since 1925, rising to 27,800 tons in 1931. The company has a staff of 150 Europeans and 1,500 natives.

Supplementing the above description of the railroad, the following information concerning the country is reprinted from a recent bulletin of the National Industrial Conference Board. The Ethiopia of the American publication is the Abyssinia of the English *Railway Gazette*, from which the description of the railway was obtained.

Ethiopia is the only independent African state. It covers an area of about 350,000 square miles. The number of its inhabitants is unknown, the various estimates ranging from 5,000,000 to 10,000,000 persons. The country is surrounded on all sides by the colonial possessions of Great Britain, Italy, and France. It has no access to the sea.

The topography of the country is extremely rugged. Climatic conditions in most sections are healthy and moderate. Although the entire territory is within the tropics, the mountainous character of the land counter-balances the closeness to the equator. In general, weather conditions are torrid in the lowlands less than 4,000 feet in height. In Danakil, adjoining the Italian colony of Eritrea, temperature is hot with semi-desert conditions, while in the valley of the river Takkaze, near the city of Adowa, fevers are prevalent. The year is divided into two seasons: the rainy season from mid-June to the end of September, and the dry season from October to the middle of June. Rains also occur during the month of March.

The country is rich in flora and fauna. There is every kind of tropical fruit in it: figs, oranges, apricots, bananas, pomegranates, date palms, and wild olives. There are large forests of untouched timber. Rubber, cotton, coffee, indigo plants, corn, wheat, barley, rye, and all sorts of vegetables grow in various parts of the country. The soil is fertile, and in most places two or three crops are harvested each year. There are immense flocks of cattle and sheep, and large numbers of horses, mules, and donkeys.

The mineral wealth of Ethiopia is indeterminable. No reliable survey of its resources has ever been made. Deposits of potash, mica, gold, and platinum have been found, and are not of any commercial significance. There are stories of the country being rich in copper, tin, coal, and oil. Their existence, however, is based on rumor rather than any known fact.

There are practically no roads available for vehicles. Transportation of persons and goods is done on pack animals, mules, donkeys, horses, or camels. Trade, domestic and foreign, is negligible. Principal exports are coffee, hides, skins, pepper, gum, and beeswax. Imports consist largely of cotton goods and cotton yarn. Ethiopia is on a silver money standard. The people use exclusively metallic money, the circulation of bank notes being negligible.

The desirability of Ethiopia as a colonial possession is due primarily to its climate which is suitable for colonization by the European peoples and to its well known agricultural wealth. To a country deficient in food supplies and with a surplus of population, Ethiopia would be a valuable economic asset provided that that country had sufficient capital for the building of roads and railroads and modernization of primitive methods of agricultural production. For a considerable time the possession of Ethiopia would not be a source of income but rather an expense.

Economic Planning

and The Railroads

PASSENGERS on American railroads who may wonder why fares aren't reduced, shippers who frown at freight rates, and colleges and universities and savings banks that own railroad securities and wonder why their interest charges aren't being met will be interested in some figures just completed that show something of the new burdens that face rail transportation systems, according to David Lawrence in a recent article appearing in the *New York Sun*.

Here are the items that may be attributed directly or indirectly to "economic planning," or in some respects lack of it, artificial control, and legislative interference whereby the Government has encouraged costs about to be imposed on the railroads:

Increased wage rates (restoration of 10 per cent deduction)	\$160,000,000
Increased prices of materials and supplies (20 per cent)	125,000,000
Increased Federal income tax (1934 basis)	2,000,000
Tax for unemployment insurance, 1936.....	16,000,000
Tax for special railway pensions.....	54,000,000
Increased cost of coal (Guffey Act)	22,500,000
Total.....	\$379,500,000

The above bill will increase in 1937 to \$395,000,000, and to \$411,500,000 in 1938, owing to increases in the tax rate for unemployment insurance.

The foregoing does not include the cost to the railways of their own pension systems, which are not credited to them in the new railway pension bill and which will cost them in 1937 about \$32,200,000.

It may be asked how the increase in wages may be attributable to Government. * * * * *

As for the pension legislation, this is distinctly the responsibility of a Congress in which the labor men have a substantial majority through their pressure groups back home in the election districts.

The increased cost of coal due to the Guffey Act

is another result of pressure group legislation. The increase in the prices of materials can be traced to the Administration's encouragement of higher prices through the NRA.

All in all, it is not surprising that in the first eight months of this year seventy-four out of ninety-five first-class railroads failed by \$124,000,000 to earn their fixed charges. The entire net income of all the railroads is not enough to absorb these increased burdens and pay the security holders a fair return on their investment, unless, of course, there is some way of giving the railroads a larger share of the freight of America.

The Government has subsidized freight carriers on the highways through providing the roads at no cost to the motor carriers. So also have the inland waterways and the Panama Canal been a source of much irritation to the railroads, because the water and motor carriers haven't had to face the same burdens. The latter, of course, will have to pay unemployment insurance, but they do not face an increase in the fuel supply costs such as do the railroads. Also the special pension legislation, added to already existing pension systems, presents a tangle that Congress is going to be asked to straighten out at the next session.

The railroad problem grows worse as the extra costs are added on from year to year. The advocates of Government ownership are happy, because the situation in a sense plays into their hands. But the taxpayers of the country who face the payment of these heavy annual charges and others of a political nature, if the Government is compelled to take over the railroads, may not be so happy when they begin to learn what the ultimate cost of transportation is going to be. Such costs will tend to rise, if minority blocs in the electorate acquire further control of a majority of Congress in the one business that is distinctly interstate and over which the Federal Government has by constitutional interpretation received jurisdiction.

Already the railway labor organizations have set up an office in Washington to lobby for Government ownership of railways at the coming sessions of Congress, so the subject is not as abstract as most discussions of Government ownership have proved to be in the past.

The Velox Boiler

Its principle may make possible the design of a more efficient and flexible boiler for locomotive use, thus assisting the Iron Horse to retain its supremacy in the motive power field.

THE locomotive was only fifty years old when, at the jubilee meeting of the British Association for the Advancement of Science, in 1881, the outstanding figure in the engineering world, Sir Frederick Bramwell, foretold its passing:

"I believe the way in which we shall use our fuel hereafter will be * * * not by way of the steam-engine * * * I doubt whether those who meet here 50 years hence (1931) will then speak of that motor except in the character of a curiosity to be found in a museum."

At a meeting of the same Association in 1884, Lord Rayleigh remarked:

"The efficiency of the steam-engine is found to be so high that there is no great margin remaining for improvement. The higher temperature possible in the gas-engine opens out much wider possibi-

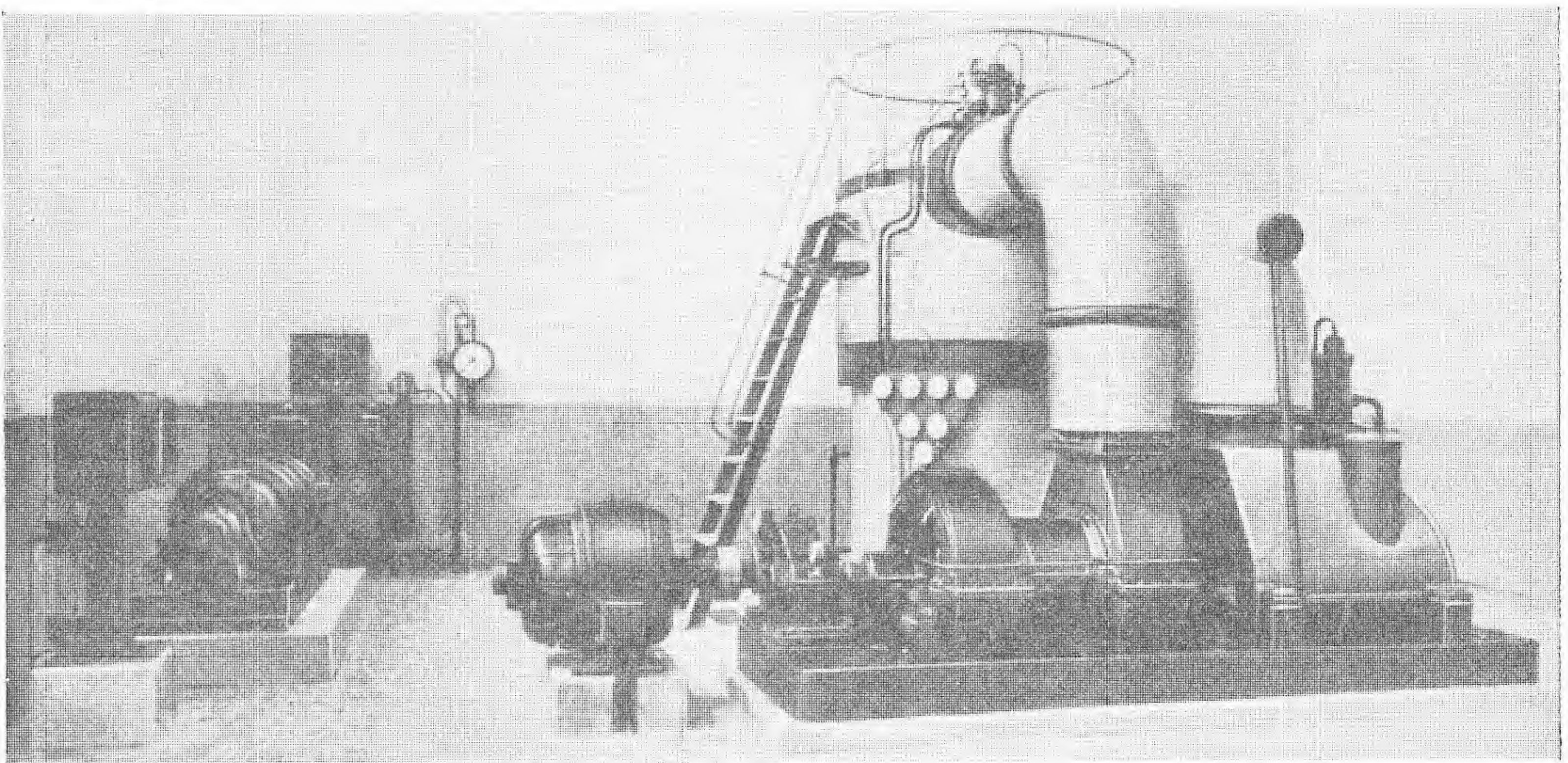
ties, and many good judges look forward to the time when the steam-engine will have to give way to its younger rival."

While commending the foresight of these men with regard to the internal combustion engine and the automotive industry, it should be remarked that the steam turbine was to enter the picture almost before they had uttered their prophecies. Thus, when Bramwell's 50 years had elapsed, instead of being a museum curiosity, the steam-engine was supplying 98.5 per cent of the power generated in his country, compared with 1.5 per cent by the internal-combustion engine that was to have displaced it.

Similarly, in railroad service, the general use of superheated steam, increased boiler pressures, better steam distribution and a multitude of other improvements have resulted in modern motive power which makes that of 1881 resemble curiosities. Yet the fundamentals are unchanged—and the steam locomotive is still far from being a museum piece.

The latest challenge is from the Diesel engine. Instead of threatening the immediate doom of the steam locomotive, as well as the stationary steam engine, it has served as a spur to steam engine and boiler designers. During the past 15 years the coal consumption of electric power generating stations

(Continued on page 189)



Velox Boiler and Stationary Power Plant

—Mechanical Engineering.

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No. 12

A Real Merry Christmas

MERRY Christmas! You can make it a happy one and start the New Year right by keeping Old Man accident out of the holiday picture. A little thought and care will raise a barricade that will keep his ugly face and black shadow out of the family circle.

You can start making your Christmas a safe one far in advance. By shopping early you can avoid fatigue and the risk of injury on congested streets, and you can also get a wider range of merchandise.

And there's more to picking out children's toys than going into a store and giving them a personal test. Toys with sharp points, ragged edges, blades, darts, arrows, and such things as air guns, rifles, knives and other weapons are not ideal playthings for children.

One of the most fascinating parts of the Yuletide season, of course, is the Christmas tree, but it can also be one of the most dangerous. Remember that properly wired electric lights are preferable to candles. If you do use candles, don't leave the lighted tree alone at any time. The tree shouldn't stand near a stove, fireplace or radiator. Mica or flake asbestos should be used for artificial snow in place of inflammable substances such as cotton, celluloid or paper.

See that the tree is anchored firmly. Don't put it where it will block an exit. And don't keep it until it dries out. Remove it by New Year's day.

The little care and thought that you expend in carrying out these precautions will insure everyone in your home a truly Merry Christmas.

Incomes

FROM the information available, Col. Leonard P. Ayres, economist and statistician, concluded that the richest ten per cent of the working and investing population receives 34 per cent of the national income.

Col. Ayres, in making this tabulation, was seeking to break down the assertion, often made, that two per cent of the people own 80 per cent of the wealth.

A few of his readers, however, were surprised and alarmed that so large a proportion of the nation's income goes to so few people.

"Everybody ought to share alike," was one retort.

Such criticism is inevitable. It comes from people who forget that no boy who goes to work at sixteen is, under any rule of fairness or common sense, entitled to the same income as a man who has saved his money for forty years and risen to the top of his profession.

No injustice will be done to the boy if the man receives an income a hundred times larger. The boy, when he becomes a man of forty, hopes to enjoy a larger income than his son will receive at twenty.

No sensible system of economics contemplates that people will save and invest their money without hope of reward. The thrifty, the industrious, and the intelligent are entitled to more than the spendthrifts, the loafers, and the morons. To argue otherwise is a sign of either greed or stupidity.
—*Through the Meshes.*

You Tell

YOU tell what you are by the friends you seek, by the very manner in which you speak, by the way you employ leisure time, by the use you make of the dollar and dime.

You tell what you are by the things you wear, by the spirit in which your burdens you bear, by the kind of things at which you laugh, by the records you play on the phonograph.

You tell what you are by the way you walk, by the things of which you delight to talk, by the manner in which you bear defeat, by so simple a thing as how you eat, by the books you choose from a well-filled shelf. In these ways, and more, you tell on yourself.

So there's really no particle of sense in an effort to keep up false pretense.—*The Uplift.*

Government Ownership

How Political Railroad Operation Works Out in Various Countries

CITING the disastrous experience of nine foreign countries with government ownership of railroads, the *Council Bluffs* (Iowa) *Nonpareil*, in a recent editorial, declares that vote-seeking politicians in this country are urging the rejection of successful principles of railway operation and advocating the adoption of theories that have never succeeded here or elsewhere.

"Since the war the railroads have been trying to repair the damage resulting from government operation," the journal says. "Complete recovery has been impossible for a number of important reasons. The depression should be placed first among these. Declines of 48.9 per cent in freight traffic and 46.3 per cent in passenger travel since 1929 tell the sad story. The decrease in income resulting from this loss of business was 50.5 per cent.

"In this distressing situation two other factors combine to make life burdensome for railway managers. One of these is the bus and truck competition and the other is the vote-seeking politicians. The panacea offered by these statesmen, so-called, for remedying the troubles of railroads is government ownership and operation.

"The railroads could be operated by the government. If the government was handling this transportation business in all probability the operating force would be doubled. Expense of operation would be a matter of small importance as it is in the postal service where deficits can be cared for with appropriations from the federal treasury.

"Government operation of railroads is not a new theory. It has been tried in this country with disastrous results. Germany is cited as the model of all states in the operation of utilities. In 1932 the government railroad management in that country chalked up a loss of \$15,000,000. In this time 600,500 employes were paid an average of \$843 a year. American railway employes earned an average of \$1,464 during this same year.

"In 1932 France lost 140,000,000 francs operating state railways. Belgium managed to break even with state operation of railroads by holding compensation of employes to an average per year of \$573. Italy uses on its state railways 144,906 employes at an average of \$777 per year pay. Its loss was ten millions in 1932.

"In 1931 Hungary operated railroads with a five million dollar loss. Norway operated at a loss of

a million dollars in 1932 and in the same year Denmark lost six millions operating state railroads. In Australia the earnings of railways are not enough to pay interest charges on the bonds issued by the government to buy and build the roads. The Canadian owned national railroad has an unbroken record of deficits ranking from forty to one hundred millions annually. Its funded debt is growing.

"Under private initiative and private ownership and management the people of the United States have constructed 260,000 miles of railroads, one-third of the total on the earth. This record has been set up with 6.3 per cent of the earth's population on five per cent of the earth's land area. And our vote-seeking politicians are telling us that we should discard the principles under which we have distanced all other nations on earth in this and other industries and adopt in their place theories that have never succeeded here or elsewhere. What will our answer be to their suggestions? Yes or no?"

Trifles

JUST had some surplus copies of *The Bulletin* returned in one of those big envelopes, Form 2399 Special, with a lot of spaces ruled off on the front so that the addressee can cross out his name and write that of some one else in the next vacant space until the envelope has been on some fifteen trips before being put in the waste basket.

The fellow who sent it to us had, thoughtlessly, managed to spread our address across two adjacent spaces, while the one who had inserted the previous address had sprawled it over no less than three of the five spaces provided in the top row. So here we have an envelope which is one-third used up, though it ought not to be half that.

It's a very small thing, but the railroad is made up of a great number of small things and comparatively few larger ones. Attention to small details is at the bottom of the success of the greatest undertakings. It's interesting to check up on the little things now and then, before they get you down.

Feminine Deadline

"Will we ever have a woman president?"

"Of course not. A president has to be over thirty-five years of age."

Swiss Christmas Customs

(Perhaps Their Superstitions Hold Good in Our Own Country)

IT is Christmas Eve and after the last candle has flickered out on the tree some of the simple peasant folk in the sequestered Swiss mountain vales set out to observe customs which have been handed down to them by many generations of ancestors. Grandmother hastens to the cellar for the most perfect specimen of an onion. This she cuts into half, peels off twelve layers, one for each month of the year to come, and in due rotation she fills them with salt. On the following morning the family is able to prepare an advance weather chart, for the peelings which contain damp salt indicate the rainy months and the peelings with dry salt stand, of course, for the fair months.

And if any member of the family is courageous enough to consult the oracle as to the length of time which is yet allotted to him on earth, he will presently take the Bible and the first Psalm which strikes his eye contains in stanzas the number of years which he is yet given to live.

If mother wishes to safeguard her chickens from all animals of prey, she will now proceed to the chicken-coop and clip the wings of the fowls before midnight, but she must be careful not to go within hearing distance of the stable where the cattle are housed, for the hour from 11 P. M. to midnight on Christmas Eve is the sacred time when the dumb beasts are said to be able to converse together—and disaster is predicted for the inquisitive who takes it upon himself to listen.

The head of the house too has his duties; all day he has been busy shoveling snow and tying bands of straw around the trunks of the trees in the orchard; with lantern in hand he now makes a last round of inspection, for the trees thus equipped in Christmas week are supposed to yield an unusually plentiful crop next year.

Christmas Eve is moreover that time of the year when Romance reigns on earth and while the older members of the family are busily occupied in their own way, an unmarried son or daughter of the house will probably slip out into the clear winter's night and, while the church bells are calling to Midnight Service, she or he will drink three sips from each of nine different fountains—an easy task in this land of public springs. After completing this curious rite, the supreme moment in the life of the young person concerned is at hand, for if the spell works, the future mate will surely

be standing at the church door and a regular courtship is usually begun. With the majority of the younger contingent of the congregation attending this nocturnal Mass, it is, of course, quite likely that the truly chosen one just "happens" to stand at the door. As everybody of the village is acquainted with the custom, it is readily surmised by those waiting for the service to start that their still missing unmarried friends must be "visiting the fountains" prior to their arrival at church.

A Comparison

COMPARISONS are seldom popular, but they sometimes tell quite a story. For instance: in England, under last year's budget, a married man with no children or other dependents except his wife was given an exemption under the tax law on the first £150 of his income. On the next £175, he was taxed at the rate of approximately 31 cents per pound. Thus a married man with an income equivalent to \$1,600 paid an income tax of \$166—and if his income exceeded that amount, he paid an even higher surtax on the remainder. Before comparing that with the amount the citizen of this country pays, it should be stated that this amount has been cut in half under the terms of the new budget for the coming year. In contrast to this is the ever increasing debt burden of the United States Federal Government as well as that of each individual state, municipality or other local taxing district, which gives positive assurance, not of decreasing taxes but of certain increase in the amounts which each individual must pay in one way or another before the thing is settled; that is, before prosperity can really return.

Then again, the Japanese national income has been calculated to amount to the equivalent of \$235 per family, the average Japanese household consisting of five people, which explains why Japanese goods can climb over any tariff walls we may set up and still undersell merchandise made under American standards of wages and working conditions. Meanwhile in this country, the unemployed "strike" in protest against "relief payments," formerly known as charity, greater than the average Japanese family income, even before heavy taxes are deducted.

The Velox Boiler

(Continued from page 185)

has been reduced from 3.2 pounds per kilowatt hour to less than 1.65 pounds.

The "Velox" boiler is the latest development which has stirred the engineering world. Oddly enough, it was inspired by the Diesel engine itself, and its advantages are such as to make it a direct competitor. Dr. Adolphe Meyer, its inventor, claims certain advantages for the "Velox" which, if proven, may have a considerable effect on future locomotive design.

Among other things the weight of the Velox steam generator is said to be only one-fifth of that of the ordinary oil-fired marine boiler and it occupies only half as much space. It will operate continuously for any desired period of time either at full or part load with equal efficiency, of between 88 and 90 per cent.

The boiler operates entirely automatically, using any kind of available oil for fuel, the exhaust gas having a low temperature and being completely invisible even at maximum output. A cold boiler can be brought up to full load in less than five minutes.

Over 20 such boilers have been built in Europe to supply steam at rates of from 4 to 75 tons of steam per hour, at pressures up to 600 pounds per square inch and temperatures up to 850 degrees.

In operation, compressed air is supplied by a blower to the combustion chamber at 15 pounds pressure. The subsequent pressure drop of the flue gases gives them a velocity which results in a high rate of heat transfer. The result is that the combustion chamber need be only one-tenth the size ordinarily required. The chamber is lined entirely with water tubes, no brick being needed.

Water level, fuel supply and combustion are all regulated automatically, yet the load can be increased from one-fourth to full in 12 to 40 seconds without any appreciable drop in pressure, and unloading can occur in the same way without popping the safety valve.

The complete boiler plant, including all auxiliary machinery weighs from 0.6 to 1.2 pounds per thousand pounds of steam generated per hour in marine installations.

The above claims of the inventor and his sponsors must still be proven by long operating experience. The automatic governing features must stand long and rigorous tests before they can be considered for railroad use. The operation of the fuel gas turbine which drives the blower supplying air to the combustion chamber is not in high favor, due to possibility of corrosion, though the metallurgist may solve this problem satisfactorily.

All of which makes it plain that this is not a new and wonderful machine on the market ready to revolutionize the mechanical world. Rather, someone has worked out a new idea to the point where, by more thought and hard work, it may be possible to produce a result as far reaching in its effects as anything yet accomplished.

Christmas Trees

HISTORY indicates that it was only in the year 354 A. D., that the Roman Bishop Liberius designated December 25th as the birthday of Christ. On this day was observed the Roman feast of Saturn, when the candles were used not only for illumination purposes, but they were also exchanged as gifts in token of cheerfulness and good-will. The Jews too, were accustomed to burn candles at that time, which happened to be their Feast of Dedication and it is thus not improbable that thousands of candles were burning throughout Palestine when Christ was born. Our present day custom of burning candles on the Christmas trees is therefore of very ancient origin and the Greek Catholics actually call Christmas "The Feast of Lights."

There is a pretty legend which relates that the history of the Christmas tree dates back to the ninth century, when a certain Saint Winfried went to preach Christianity to the people in Scandinavia and Northern Germany. One Christmas Eve these people gathered round a huge oak to offer a human sacrifice, according to the Druid rites, but St. Winfried hewed down the great tree and as it fell there appeared in its place a tall young fir. When St. Winfried saw it he said to the people:

"Here is a new tree, unstained by blood. See how it points to the sky! Call it the tree of the Christ Child. Take it up and carry it to the Castle of your chief. Henceforth you shall not go into the shadows of the forest to hold your feasts with secret rites of shame. You shall hold them within the walls of your own home with ceremonies that speak the message of peace and good-will to all. A day is coming when there shall not be a home in the north wherein on the birthday of Christ the whole family will not gather around the fir tree in memory of this day and to the glory of God."

Since the passing of those days the custom of the Christmas tree has found its way into the remotest corners of the earth. Its significance and purpose have been crystalized in Christian minds and hearts and yet, there somehow remains here and there the observance of certain quaint customs in the Christmas season.

Colds

THE early signs of a cold are often the same as the early signs of influenza and other contagious diseases such as measles, scarlet fever, and whooping cough. It is important to take care of what seems at first to be a cold, as it may turn out to be a more serious sickness.

There appear to be at least two ways of catching cold: from a person known to have a cold or from no directly evident source.

The germs which cause you to catch cold may be breathed into your nose and throat passages from the air when you are near an infected person who is talking, coughing, or sneezing. You may catch cold by using an unwashed glass, spoon, or fork, which has been used or handled by someone with a cold. The germs may be on your hands because you have touched something which has been handled by the person with a cold.

Medical specialists warn that individuals who are exposed to dusts or other irritants or who have adenoids or diseased tonsils or who are run-down or fatigued or improperly fed are more likely to have colds than others in good physical condition.

At the first sign of a cold, such as tickling, soreness, or dryness in the throat, sneezing, or a running nose, you should start treatment right away. Very few colds would develop into serious illness if the person who has a cold were wise enough to take proper care of himself the first day or two.

Rest in bed, if possible, or at least indoors. This is particularly important if you feel weak, as weakness may be a sign of influenza. Take a laxative. Drink plenty of cold water and eat lightly of simple, wholesome food. Breathing steam, if the doctor advises it, may relieve the stopped-up feeling.

At night, before going to bed, take a hot bath or at least a hot foot bath. As soon as you have rubbed yourself dry, cover up in bed with extra blankets so that you can "sweat the cold out of your system." A hot drink, such as hot lemonade, will help you perspire.

Some of the tablets sold as remedies for colds contain drugs that are bad for the heart and blood and may cause a drug habit. Cold tablets or any other medicine should not be taken, except when ordered by a doctor.

Do not use a nasal douche, unless advised to do so by a doctor, and do not blow the nose too hard. If you do, the infection may spread to other parts of the head or to the tubes leading to the ears.

In order not to give your cold to others, always cough or sneeze into a handkerchief (which should be boiled to kill germs before it is washed) or a

cloth or paper napkin or handkerchief that can be burned. Dishes, including drinking glasses, used by the person with a cold should be boiled after use.

Golf

GOLF is a form of work made expensive enough for man to enjoy it. Golf is what letter-carrying, ditch-digging and carpet-beating would be if those three tasks had to be performed on the same hot afternoon in short pants and colored socks by men who would not otherwise walk a block to see the Statue of Liberty sit down.

"It is the only known game that a man can play for 25 years and then discover that it was too deep for him in the first place. There are 18 'greens' on a golf course; each green is a small parcel of carefully selected grass costing about \$2.67 a blade and usually placed between a brook and several unfinished excavations by some fiend in human form, doubtless chief adviser to Satan.

"After each hole has been played the golfer adds up his score, subtracts four and says: 'Made that one in par; shall we play for 50 cents on the next hole, too, Ed?' A peculiarity of the game is that even expert mathematicians can not add above 87 on a golf score card.

"At the end of the game each golfer joins the others in the locker room, sings 'Sweet Adeline,' then goes home and spanks his son for telling lies."—*Lifted*.

What a Pal!

When the late King Edward was a lad, he and his brother used to scam from the palace and go about London incog. One day they kiddingly induced a street urchin to heave a stone at a bobbie. The lad knocked off the bobbie's helmet and all three were arrested and brought before the magistrate.

"Your name?"

"I'm the Prince of Wales, your honor."

"Yours?"

"I'm the Duke of Connaught."

"And yours?"

"Well, yer honor, I can't go back on me pals," said the urchin. "I'm the Archbishop of Canterbury."—*Ex*.

Persistent

Peddler: "Any teapot spouts, pencils, pens, plates, or baskets today, mum?"

Lady of the House: "If you don't go away I'll call the police."

Peddler: "'Ere you are mum—whistles, six-pence each."—*Humorist*.

Clicks from the Rails

The World's Busiest Railroad

is believed to be the New York Division of the Pennsylvania, the main line of which extends from New York to Philadelphia, 90 miles. On each week day in the 60 minutes between 8 and 9 A. M., 78 trains enter or leave the New York station, an average of one train movement every 46 seconds. During that same hour 44 regular trains, chiefly through expresses, are moving over the division in the direction of New York.



Killing an Elephant

may prove costly to the Tezpur-Balipara Light Railway, of India. The Secretary of State for India, represented by the Forest Department of the Assam Government, has brought suit for \$811 damages against the railway for killing a government-owned elephant. The complaint says that the railway "rashly and negligently drove a railway train over the animal near the Nelarania siding." The negligence may have to be proved.



Train-Watching

is a diversion not confined to country towns where the arrival of the train is the event of the day. At Darlington, England, where the new London North Eastern flyer *Silver Jubilee* makes its only stop between Newcastle and London, 350 people used to buy platform tickets daily. Since the new train was inaugurated sales have jumped to 1,000 a day.



A Traveling Store

was operated over the Baltimore & Ohio-Alton this summer by Marshall Field & Co., Chicago. A ten-car, completely air-conditioned train, containing merchandise of every description, passed through 20 of the larger Mississippi Valley cities. A staff of 25 salespersons accompanied the train selling and taking orders for goods.

A Runaway Train

tied up the entire line of the Burlington and Missouri River back in 1884 for three hours. A wind storm, amounting almost to a tornado, started a train of eight cars, loaded with coal, which had been standing on a siding at Akron. They ran through a switch and out on the main line. All other trains were sidetracked as the runaway sped over the division, 100 miles long, at an average speed of 33 miles an hour. Down one grade the cars covered 20 miles in 18 minutes. Finally a locomotive was sent in pursuit and after a chase of several miles a coupling was made and the runaway stopped.



An Unnoticed Accident

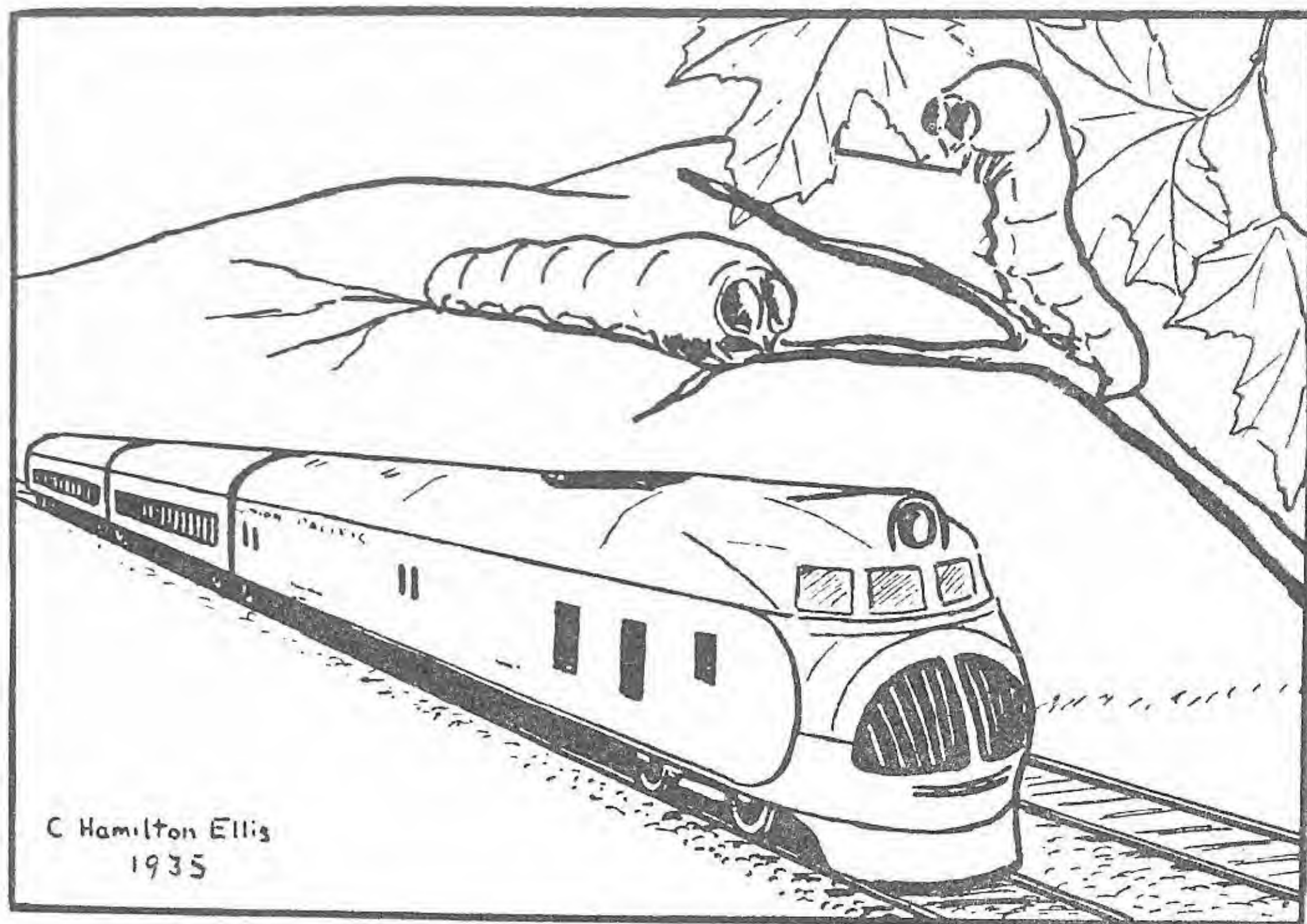
recently occurred on the Northern Pacific when a train and an automobile nearly crashed on a grade crossing. Later, at a coal-ing station, the engineer found an automobile trailer's wheels draped over the pilot, while the farmer discovered that his trailer was missing.



Locomotive Whistles

are 100 years old this year, the first one having been manufactured by Taylour and Company, of Warrington, England, in 1835. Previously, a post-horn was used.

Sort of a "Worm's-eye" View



Informative caterpillar: "There you are, Clarence, they have to go through the larval state, just as you and I do."
—RAILWAY GAZETTE.

Gifts

The best thing to give to your enemy
if forgiveness; to an opponent,
tolerance; to a friend, your heart;
to your child, a good example; to a fa-
ther, deference; to a mother, conduct
that will make her proud of you; to
yourself, respect; to all men, charity. —
J. M. Balfour.